

**APPARATUSES AND METHODS FOR MODELING SHARED BUS  
SYSTEMS**

**ABSTRACT**

5 A software-implemented shared bus system model for modeling a shared bus system that includes a plurality of devices interconnected via a shared bus. The system model includes a first device model for partially modeling a first one of the plurality of devices, the first device model including a first modified logical module and a first modified I/O-specific module. The system model further includes a  
10 sharable module having provisioned therein first shareable data. The first shareable data is shareable by the first device model and another device model of the plurality of device models. The first shareable data represents I/O-specific data associated with the first device model that is also needed by the another device model of the plurality of device models during configuration of the shared bus system model. The first  
15 shareable data further represents data that would have been provisioned within the first device model if the first device model had been configured to closely mimic the data content of the first one of the plurality of devices, the first shareable data instead being provisioned in the shareable module.

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